

## Safety Information For the use of an Article

(Not required by the REACH – GHS Regulations)

### SECTION 1: Identification of the article and of the company/undertaking

Date of first issue	16/07/2014
Revision date	<b>20/01/2023</b>
Version number	7
Supersedes version from	16/07/2014

#### 1.1. Product identifier

Article	<b>Hot rolled structural steel Sections and Merchant Bars without any coating</b>
Reach status	Article
Company	<b>ArcelorMittal</b> 24-26 boulevard d'Avranches L-1160 Luxembourg
Telephone	+ 352 47 92 1
E-mail	<a href="mailto:rip.reach@arcelormittal.com">rip.reach@arcelormittal.com</a>
Website	<a href="http://www.sections.arcelormittal.com">www.sections.arcelormittal.com</a>

#### 1.2. Relevant identified uses of the article and uses advised against

Identified Uses:	Product intended for construction of buildings, bridges and other structures
Uses advised against	None known

#### 1.3. Details of the supplier of the safety data sheet

Department supplying safety information	ArcelorMittal Europe Long Products CTO team AOB 66, rue de Luxembourg L-4221 Esch sur Alzette
E-mail	<a href="mailto:jean-paul.lorrain@arcelormittal.com">jean-paul.lorrain@arcelormittal.com</a>

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance

Hot rolled structural steel Sections and Merchant Bars without any coating are considered as an article under REACH regulation and is not subjected to Classification, Labelling and Packaging (CLP) of substances and mixtures regulation (1272/2008/EC).

#### 2.2. Label Elements

Not applicable

### 2.3. Other hazards

<b>Specific hazards:</b>	Related to dust and smoke only when processing steel
<b>Skin contact:</b>	Not applicable to product as it is. In the event of direct contacts (without gloves): - Local effects: Possible irritation phenomena. - Sensitization: Possible allergy phenomena. - Cuts.
<b>Eye contact:</b>	With dust (indirect contact): risk of irritation.
<b>Inhalation:</b>	During mechanical or thermal processing (e.g. welding, cutting, grinding), dusts or vapours may occur. Occupational exposure limit values are mentioned in section 8.
<b>Ingestion:</b>	Not applicable as it is.
<b>Main hazard to the environment:</b>	None.
<b>Prevention:</b>	Safety gloves and glasses must be worn during handling.

## SECTION 3: Composition/information on ingredients

Chemical composition (percent by weight):

Steel
<u>Main Elements:</u> Fe > 94%, Mn < 1.7%, Cr < 1.25%,  <u>Others elements:</u> P < 0.040%, Si < 0.55, Cu < 0.60%, Al < 0.02%, Nb < 0.05%, V < 0.15%, Ti < 0.05%, Mo < 0.20%, Ni < 0.80%

Other information : not oiled

### Standards

European	American
EN10365, EN10056, EN10025, EN10225, ETA 10-156	ASTM A6, A36, A572, A588, A709, A992, A913

## SECTION 4: First aid measures

<b>Specific hazards:</b>	Not applicable to article as it is. Only related to dust and smoke when processing steel.
<b>Skin contact:</b>	Wash well with soap and large amounts of water. For cuts, treat as normal cut and if needed ask for medical assistance.
<b>Eye contact:</b>	Rinse with large amounts of water. Take medical advice.
<b>Inhalation:</b>	If exposure to important quantities of fumes, remove to fresh air and ask for medical assistance if needed.
<b>Ingestion:</b>	Not applicable as it is.

## SECTION 5: Firefighting measures

**General fire hazards** Non-flammable.

**5.1. Extinguishing media** Use extinction means suitable with the products stored in the area.

**5.2. Special hazards arising from article** Not applicable

**SECTION 6: Accidental release measures**

Not applicable

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Use suitable equipment for lifting the article as it is heavy loads  
 If delivered in packages or bundles, normal precautions should be taken to avoid possible injuries by sharp edges or by the release of tension when breaking the steel straps.  
 Safety helmet must be worn when articles are handled with cranes.  
 Packaging materials: Tightened steel straps

**7.2. Conditions for safe storage, including any incompatibilities**

Not applicable to article as it is

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

Please note that these exposure limits are not directly associated with the product but with possible exposures that may occur during processing activities such as grinding or cutting.

Depending on the steel composition and the processing activities, several substances may be emitted. As guidelines, a non-exhaustive list of potential substances which may be emitted during processing is proposed below. Occupational Exposure Limits, at the date of issue, for some European Countries are also summarised. For other locations or for updated information please refer to local regulations.

**EU. Scientific Committee on Occupational Exposure Limit Values (SCOELs), European Commission - SCOEL, last year of adoption 2014**

Components	Type	Value	Form
Manganese and its inorganic compounds as Mn	TWA	0.2 mg/m <sup>3</sup> 0.05 mg/m <sup>3</sup>	Inhalable Respirable
Nickel and inorganic nickel compounds	TWA	0.005 mg/m <sup>3</sup>	Respirable
Chromium Metal, Inorganic Chromium (II) Compounds, and Inorganic Chromium (III) as Cr	TWA	2 mg/m <sup>3</sup>	Total Dust
Chromium (VI) and its compounds (until January 17 <sup>th</sup> 2025)	TWA	0.01 mg/m <sup>3</sup> 0.025 mg/m <sup>3</sup>	As Cr As fumes
Chromium (VI) and its compounds (from January 17 <sup>th</sup> 2025)	TWA	0.005 mg/m <sup>3</sup>	As Cr
Copper and its inorganic compounds	TWA	0.01 mg/m <sup>3</sup>	Respirable

**France. OELs. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France according to INRS, ED 984, October 2016, last updated on 14 January 2022**

Substance	Type	Value	Form
Dust (until June 30 <sup>th</sup> 2023)	TWA	7 mg/m <sup>3</sup>	Inhalable fraction
		3 mg/m <sup>3</sup>	Respirable fraction
Dust (from July 1 <sup>st</sup> 2023)	TWA	4 mg/m <sup>3</sup>	Inhalable fraction
		0.9 mg/m <sup>3</sup>	Respirable fraction
Iron oxides	TWA	5 mg/m <sup>3</sup>	As fumes
Manganese and its compounds, as Mn	TWA	0.2mg/m <sup>3</sup>	Inhalable fraction
		0.05mg/m <sup>3</sup>	Respirable fraction
Aluminium and aluminium oxide	TWA	10 mg/m <sup>3</sup>	As Al
	TWA	5 mg/m <sup>3</sup>	As fumes
Diphosphorus pentaoxide	TWA	1 mg/m <sup>3</sup>	-
Nickel and nickel oxide	TWA	1 mg/m <sup>3</sup>	-
Silicon	TWA	10 mg/m <sup>3</sup>	-
	TWA	0.2 mg/m <sup>3</sup>	As fumes
Copper	TWA	1 mg/m <sup>3</sup>	As dust
	STEL	2 mg/m <sup>3</sup>	As dust
Chromium Metal, Inorganic Chromium (II) Compounds, and Inorganic Chromium (III)	TWA	2 mg/m <sup>3</sup>	As Cr
		0.001 mg/m <sup>3</sup>	-
Chromium (VI) and its compounds	TWA	0.001 mg/m <sup>3</sup>	-
	STEL	0.005 mg/m <sup>3</sup>	-
Molybdenum	TWA	5 mg/m <sup>3</sup>	Soluble compounds
	STEL	10 mg/m <sup>3</sup>	
Titanium dioxide	TWA	10mg/m <sup>3</sup>	As Ti
Vanadium pentoxide	TWA	0.05mg/m <sup>3</sup>	As V <sub>2</sub> O <sub>5</sub> , dust and fumes

**Netherlands. OELs per Annex XIII of Working Conditions Regulation (Staatscourant no. 252, 29 December 2006; last amended by Staatscourant no. 34685, 8 July 2021)**

Components	Type	Value	Form
Manganese and its inorganic compounds as Mn	TWA	0.2 mg/m <sup>3</sup>	Inhalable
		0.05 mg/m <sup>3</sup>	Respirable
Diphosphorus pentaoxide	TWA	1 mg/m <sup>3</sup>	-
	STEL	5 mg/m <sup>3</sup>	-
Chromium Metal	TWA	0.5mg/m <sup>3</sup>	-
Chromium (VI) and its compounds	TWA	0.001 mg/m <sup>3</sup>	As Cr
Copper and inorganic compounds	TWA	0.1 mg/m <sup>3</sup>	Inhalable

Vanadium oxide	TWA	0.01 mg/m <sup>3</sup>	As V
	STEL	0.03 mg/m <sup>3</sup>	

**Germany. TRGS 900, Occupational Exposure Limits (AGW), amended through 25 Feb 2022**

Substance	Type	Value	Form
Dust	TWA	10 mg/m <sup>3</sup>	Inhalable fraction
	STEL factor	2	
	TWA	1.25 mg/m <sup>3</sup>	Respirable fraction
Manganese and inorganic compounds, as Mn	TWA	0.2 mg/m <sup>3</sup>	Inhalable fraction
	STEL factor	8	
	TWA	0.02 mg/m <sup>3</sup>	Respirable fraction
	STEL factor	8	
Diphosphorus pentaoxide	TWA	2 mg/m <sup>3</sup>	Inhalable fraction
	STEL factor	2	
Vanadium and inorganic compounds	TWA	0.03 mg/m <sup>3</sup>	Inhalable fraction
	STEL factor	1	
	TWA	0,005 mg/m <sup>3</sup>	Respirable fraction
	STEL factor	1	
Nickel and inorganic compounds	TWA	0.03 mg/m <sup>3</sup>	As Ni
	STEL factor	8	
	TWA	0.006 mg/m <sup>3</sup>	Respirable fraction
	STEL factor	8	
Chromium Metal, Inorganic Chromium (II) Compounds, and Inorganic Chromium (III) as Cr	TWA	2 mg/m <sup>3</sup>	Respirable fraction, as Cr
	STEL factor	1	

**Germany. Substance-specific Acceptable and Tolerable Concentrations (Table 1 of Annex 1), TRGS 910, amended through 2 July 2021**

Chromium VI compounds	TWA	1 µg/m <sup>3</sup>	Inhalable fraction, as Cr
	STEL factor	8	

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), Report No. 57 (2021)**

Components	Type	Value	Form
Aluminium oxides	TWA	4 mg/m <sup>3</sup>	Inhalable fraction
		1.5 mg/m <sup>3</sup>	Respirable fraction
Titanium dioxide	TWA	0.3 mg/m <sup>3</sup>	Respirable fraction
Silica (amorphous)	TWA	0.5 mg/m <sup>3</sup>	Respirable fraction
Copper and its inorganic compounds	TWA	0.01 mg/m <sup>3</sup>	Respirable fraction

## 8.2. Exposure controls

### Appropriate engineering controls

Respect occupational exposure limits. When thermal processing activities (welding, flame cutting) or mechanical grinding take place, local exhaust ventilation should be used to remove any fumes or dust produced. If a large amount of fume is generated, if dust cannot be exhausted by the local exhaust ventilation and if exposure is likely to exceed the OEL, suitable and appropriate respiratory protection should be worn. Orin- nasal respirators fitted with either FFP2 or FFP3 (EN149)- depending on concentration- may be used when fumes or dust levels are high. Manufacturer's directions for proper use of respirators must be followed.

### Whole-body protection

Wear suitable clothes and shoes.

### Protection of hands

Wear suitable gloves (anti-cut).

### Protection of eyes and/or face

Wear eye/face protection depending on the activity.

### Respiratory protection

Respiratory protection may be used if OEL limits are exceeded during processing activities (see "appropriate engineering controls")

### Hygiene measures

Not applicable to article as it is.

## SECTION 9: Physical and chemical properties

### Physical state

Solid.

### Colour

Black

### pH

Not applicable.

### Characteristic temperatures

Not applicable.

### Flash point

Not applicable.

### Oxidizing properties

Not applicable.

### Specific density

About 7800 Kg/m<sup>3</sup>.

### Solubility

Not applicable, article not soluble in water.

### Radioactivity

None in all cases.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not applicable.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions with usual substances.

### 10.4. Conditions to be avoided

None.

### 10.5. Incompatible materials

Avoid contact with acids.

### 10.6. Hazardous decomposition products

None.

## SECTION: Toxicological information

### 11.1. Information on toxicological effects

Not applicable to product as it is

## SECTION 12: Ecological information

**Ecotoxicity** Article insoluble in water. Material recycled from scrap.  
**Biodegradation** Not applicable to inorganics

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Treatment procedure prior to disposal** Article recyclable and recycled from scraps in compliance with Directive 2000/53/EC on end-of-life vehicles and Directive 2011/65/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment.  
**Destruction**

**Used packaging cleaning, treatment, destruction procedures** Destruction of packaging in accordance with applicable legislation.

## SECTION 14: Transport information

Article not dangerous with regard to transport rules.

## SECTION 15: Regulatory information

### Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

This article does not contain substances of the REACH Candidate list above 0.1% by weight.

### Regulation (EC) No. 1907/2006, REACH Article 67(1). Annex XVII

The steel products mentioned above may contain residuals such as Arsenic, Cadmium, Lead, Mercury and Nickel.

Annex XVII restriction number	Substances	Maximum Content (% by weight)
18	Mercury	0.1%
19	Arsenic	0.1%
23	Cadmium	0.01%
27	Nickel	0.1%
63	Lead	0.05%

The annex XVII of REACH regulation imposes restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

We understand that our steel products are not relevant to, or are not intended to be used for the applications mentioned in the restrictions 18, 19, 23. Restrictions 27 and 63 may concern our steel products as they contain restricted substances, please consult us for further verification.

### European Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) and its amendments

This article is compliant.

## SECTION 16: Other information

### List of abbreviations

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

Version	Changes
1	First edition
2	Section 8: Update of OELs and new substances added.
3	Update of section
4	Update due to creation of ArcelorMittal
5	Update of the Occupational Exposure Limits and implementation of Reach and GHS regulations
6	New format, update of the Occupational Exposure Limits, update of section 1.1.
7	Updated layout, all sections updated

**Comments to the Users:**

*Due to the fact that the product concerned in this document has a status of article in the meaning of the Reach regulation, this document doesn't constitute a Safety Data Sheet in the meaning of the article 31 of the REACH regulation n° 1907-2006. In consequence, its supply is purely facultative. It enables to communicate the risks related to the processing of the article.*

*This sheet supplements but does not replace instruction manuals. The information contained herein is given to the best of our knowledge concerning the article indicated on the date on which it was updated. Information is provided in good faith.*

*Attention of users is also drawn to possible risks which may arise if the article is applied for purposes other than those for which it has been designed.*

*This sheet does not in any way exempt the user from knowing and complying with all the regulatory texts applying to his or her activity. The user takes full responsibility for knowing and taking the precautions related to the use of the article. References to regulatory provisions are given to assist the user in fulfilling the obligations incumbent on persons using a dangerous preparation.*

*All local and international measures and provisions which could apply should be referred to.*

*Attention of users is drawn to the possible existence of other provisions supplementing these rules.*

*This list is not to be taken as comprehensive. It does not exempt the user from ensuring that obligations under texts other than those to which reference is made do not apply to the detention and use of the article, for which the user alone is responsible.*